

**IMPLEMENTING RF POWER MEASUREMENTS IN A BROADBAND  
COMMUNICATIONS DEVICE**

**ABSTRACT**

5 The invention provides systems, methods, and devices that compensate for  
temperature, frequency, and sampling effects in a broadband communication  
device's power measurements. One embodiment of a system includes a thermal  
device, and an automatic gain control circuit coupled to the thermal device. One  
method includes the acts of disabling a TOP operation, setting a RF input power,  
reading an AGC GAIN value, and setting the broadband communications device  
10 based on the read AGC value. Furthermore, a broadband communications device  
according to the invention may operate by disabling a TOP operation, setting a RF  
input power, reading an AGC GAIN value, and setting the broadband  
communications device based on the read AGC value.